In the Supreme Court of the United States

SAMSUNG ELECTRONICS CO., LTD., ET AL., Petitioners,

v. APPLE INC.,

Respondent.

On Writ of Certiorari to the United States Court of Appeals for the Federal Circuit

BRIEF OF AMICI CURIAE THE HISPANIC LEADERSHIP FUND, THE NATIONAL BLACK CHAMBER OF COMMERCE, AND THE NATIONAL **GRANGE OF THE ORDER OF THE PATRONS OF HUSBANDRY IN SUPPORT OF PETITIONERS**

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TABLE OF AUTHORITIES

Cases:

Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141 (1989)	7
<i>Ex Parte Crane</i> , 1869 Dec. Comm'r Pat. 7	12
Forest Grp., Inc. v. Bon Tool Co., 590 F.3d 1295 (Fed. Cir. 2009)	11
Gorham Co. v. White, 81 U.S. (14 Wall.) 511 (1872)	
Nordock, Inc. v. Systems, Inc., 803 F.3d 1344 (Fed. Cir. 2015)	9, 12
Stauffer v. Brooks Bros., Inc., 619 F.3d 1321 (Fed. Cir. 2010)	11
Statutes and Legislative Materials:	
18 U.S.C. 2320	6
35 U.S.C. 284	6
35 U.S.C. 287(a)	11
35 U.S.C. 289	. passim
35 U.S.C. 292(b)	11
Leahy-Smith America Invents Act, Pub. L. 112- 29, 125 Stat. 284 (2011	11
<u>Other Authorities</u> :	
Am. Indep. Bus. Alliance, <i>Ten Studies of the</i> <i>"Local Economic Premium"</i> (Oct. 2012), <http: 1wxbm21="" bit.ly=""></http:>	23

Gordon Arbuckle Jr., Iowa State Univ. Extension & Outreach, <i>Iowa State Survey</i> <i>Shows Farmers Using Information</i> <i>Technology for Decision-making</i> (Sept. 23, 2015), <http: 1usdjiy="" bit.ly=""></http:>	
Ann Armstrong et al., <i>The Smartphone Royalty</i> Stack: Surveying Royalty Demands for the Components Within Modern Smartphones (WilmerHale Working Paper Apr. 2014), <http: 1qtidyv="" bit.ly=""></http:>	
Colleen Chien, Startups and Patent Trolls, 17 Stan. Tech. L. Rev. 461 (2014)	8
Lisa M. Coleman, Creating a Path to Universal Access: The FCC's Network Neutrality Rules, the Digital Divide, & the Human Right to Participate in Cultural Life, 30 Temp. J. Sci., Tech. & Envt'l L. 33 (2011)	
ConnectEd Initiative, Exec. Office of the President,	

iv

FCC, Connecting America: the National Broadband Plan (2011),
<http: 1jhqkmn="" bit.ly=""></http:>
Robin Feldman, Patent Demands and Startup Companies: The View from the Venture Capital Community (UC Hastings Research Paper No. 75, 2013)
Roberto Gallardo, <i>Study: Trends in Rural</i> <i>Businesses</i> , Daily Yonder, May 7, 2015, <http: 1uo26tv="" bit.ly="">15, 23</http:>
The Hispanic Inst., <i>Hispanic Broadband</i> Access: Making the Most of the Mobile, Connected Future, Mobile Future (July 2012), <http: 1tqnnr7="" bit.ly="">21</http:>
Lynette Holloway, Apple vs. Samsung: Could Ruling Widen Digital Divide?, NewsOne, 2014, <http: 1jfytqh="" bit.ly="">24</http:>
John B. Horrigan et al., Pew Research Ctr., Home Broadband 2015 (Dec. 12, 2014), <http: 1pbbjc9="" pewrsr.ch="">21</http:>
HUD, Understanding the Broadband Access Gap, PDR Edge, http://bit.ly/1Zq9Gks >
J.P. Morgan Chase & Co., <i>The Big Difference</i> Small Businesses Can Make, Politico, Apr. 22, 2016, <http: 1sjlwh1="" politi.co="">14, 15</http:>
Stephen Kiebzak et al., The <i>Effect of Patent</i> <i>Litigation and Patent Assertion</i> Entities on Entrepreneurial Activity (MIT Sloan Sch. of Mgmt., Working Paper No. 5095-14, 2015)

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Guiseppe Macri, Patent Trolls Are Already
Abusing the Apple v. Samsung Ruling,
InsideSources (Oct. 1, 2015),
<http: 1tug13t="" bit.ly="">11</http:>
Gerard N. Magliocca, Blackberries and
Barnyards: Patent Trolls and the Perils of
Innovation, 82 Notre Dame L. Rev. 1809,
(2007)
Deborah Markley et al., RUPRI, Access to
Capital in Rural America: Supporting
Business Startup, Growth and Job Creation
in the Wake of the Great Recession, Interim
Brief (Apr. 2012), <http: 1pdhdsu="" bit.ly="">15</http:>
Scott Martin, Consumers likely to feel impact of
Apple defeat of Samsung, USA Today, Aug. 27,
2012, <http: 1vghomh="" usat.ly=""></http:>
Kelsey I. Nix & Laurie N. Stempler, <i>Federal</i>
Circuit Ignites Interest in False Patent
Marking Lawsuits, The Metro. Corporate
Counsel (Oct. 2010),
11">http://bit.ly/1WBhVMG>11
NPD Grp., U.S. Smartphone Sales among Consumers Earning Less than \$30,000 Grow
More Than 50 Percent, According to the NPD
Group (Apr. 15, 2015),
<a>http://bit.ly/1Ya92ZZ>
Devah Pager et al., The Sociology of
Discrimination: Racial Discrimination in
Employment, Housing, Credit, and Consumer
Markets, 34 Ann. Rev. Sociology 181 (2008) 20

Patent Reform Impact on Small Venture-	
Backed Companies: Hearing Before the H.	
Small Bus. Comm., 110th Cong. 98 (2007)	5
Andrew Perrin et al., Pew Research Ctr.,	
Americans' Internet Access: 2000-2015	
1(2015), <http: 1wbiywb="" pewrsr.ch="">19</http:>	9
James Prieger, The Broadband Digital Divide	
and the Benefits of Mobile Broadband for	
Minorities (Pepperdine Univ. Sch. of Pub.	
Policy, Working Paper No. 45 2013) 19, 22	1
Clara Ritger, How Mobile Apps Could	
Transform Rural Health Care, Nat'l J., Nov.	
11, 2013	2
Nick Russo et al., Open Tech. Inst., The Cost of	
Connectivity 2014 (2014),	
<http: 1zw03av="" bit.ly=""></http:>	4
Aaron Smith, Pew Research Ctr., Searching for	
Work in the Digital Era 10, 17 (Nov. 19, 2015),	
<http: 216mdjs="" pewrsr.ch="">22</http:>	2
Aaron Smith, Pew Research Ctr., U.S.	
Smartphone Use in 2015 13 (2015),	
<http: 19jdwmd="" pewrsr.ch="">21, 22, 23, 24</http:>	4
Tim Sparapani, Stretched Too Far: Convoluted	
Design Patent Rules Empower Patent Trolls,	
Forbes, Dec. 3, 2015,	
<http: 1ns9nnm="" onforb.es=""></http:>	8
U.S. Census Bureau, 2014 Nat'l Population	
Projections: Summary Tables Table 10,	
<a>http://l.usa.gov/lvON2Gp>19	9

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U.S. Dep't of Commerce, Falling Through the Net: a Survey of the "Have Nots" in Rural and Urban America (Jul. 1995), <http: 1.usa.gov="" 1ulcoyr="">18</http:>
U.S. Dep't of Commerce, Nat'l Telecomm. & Info. Admin., Digital Nation: Expanding Internet Usage (Feb. 2011)
USPTO Statistics, Design Patenting by Organizations (2015), <http: 1.usa.gov="" 25fle8k="">17</http:>
VEDC, Investing in the Success of African- American-Small Businesses: Recommendations for Increasing Access to Capital (Oct. 2015)16
Valentina Zarya, The fastest growing group of entrepreneurs in the U.S.? Minority Women, Fortune, Aug. 21, 2015, <http: 1uxjyxy="" for.tn=""></http:>
<u>Treatises:</u>
Hector T. Fenton, The Law of Patents for Designs 225 (1889)12

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INTEREST OF AMICI CURIAE¹

Amici are nonprofit, nonpartisan groups representing communities that have been marginalized in American society by racial discrimination, poverty, cultural and language barriers, and geographic isolation. *Amici* share a common goal of fostering prosperity for these communities by encouraging entrepreneurship and small businesses.

The Hispanic Leadership Fund is dedicated to strengthening working families by promoting commonsense policy solutions that foster liberty, opportunity, and prosperity, with a particular interest in issues affecting the Hispanic community.

The National Black Chamber of Commerce seeks the economic empowerment of African-American communities through entrepreneurship. It advocates for all 2.4 million African-American-owned businesses in the United States and the communities they serve.

The National Grange of the Order of the Patrons of Husbandry is a dedicated fraternal organization that has championed America's farmers, ranchers, and other rural residents for nearly 150 years.

¹ Petitioners have consented to the filing of amicus briefs in support of either party in a letter on file with the Clerk. Respondent has consented to *amici*'s brief by letter, a copy of which has been filed with this brief. No counsel for a party authored this brief in whole or in part, and no entity, other than *amici*, their members, or their counsel, has made a monetary contribution to the preparation or submission of this brief.

Amici are deeply concerned about the outcome of this case. If the Federal Circuit's interpretation of Section 289 of the Patent Act entitling design-patent holders to all of the profits earned on infringing devices is not reversed, it will be harder for entrepreneurs to start and develop businesses, especially those from the minority and rural communities *amici* represent. These excessive damages also risk making it unaffordable for millions of low-income, rural, and minority Americans to obtain Internet access, an indispensable tool for social, economic, and political mobility in the United States.

SUMMARY OF THE ARGUMENT

The Federal Circuit interpreted Section 289 of the Patent Act to permit design-patent holders to recover all of the profits earned on infringing products, even for designs covering only a small part of a product, or contributing little to the product's overall value. Pet. App. 27a-29-a. As Petitioner has explained, this interpretation is inconsistent with the text, history and underlying purposes of Section 289, and cannot be squared with deeply rooted limits on compensation widely adopted throughout all of American law, including intellectual property law. *Amici* write separately to explain the real-world harms likely to flow from this erroneous interpretation of Section 289.

Interpreting Section 289 to permit entire-profits awards would inhibit competition in ways that will adversely impact American commerce. And these adverse effects will fall hardest on those who have the least, including the low-income, minority, and rural Americans *amici* represent, whose social and economic progress is already hampered by a host of other disadvantages.

The existence of entire-profits awards under Section 289 would make it harder for entrepreneurs to enter markets or grow their businesses, by enabling designpatent "trolls" to extract excessive royalties, and giving market incumbents yet another means to unfairly inhibit their less-established rivals' competitiveness. Threats from each of these sources will exert powerful leverage on many small-business entrepreneurs, making it harder for them to participate in a wide swath of industries, from high-tech consumer electronics to heavy farming equipment. But these threats could prove to be a special burden for entrepreneurs from minority and rural communities—and not just because the businesses owned by these entrepreneurs tend to be small.

Threats of dramatically excessive design patent damages will compound historic difficulties that entrepreneurs from these communities have experienced, which make them dependent on open, competitive markets to succeed, and which leave them particularly vulnerable to anti-competitive threats from design-patent holders. The stakes are also much higher for minority-owned and rural businesses, because their success represents not only prosperity for their owners, but also opportunities for jobs, empowerment, and progress for others.

Entire-profits awards could also harm many from the communities *amici* represent by depriving them of the life-altering benefits of Internet access. For millions in these communities, barriers of cost, culture, language—and for some, a dearth of basic Internet infrastructure—have all conspired to make Internet access unattainable.

Affordable smartphones have provided Internet access to many who would otherwise not be able to afford it. But the decreased competition and increased smartphone prices likely to result from the availability of entire-profits awards could deprive these people of vital Internet access. This could mean lost connections and missed vital opportunities.

Congress would never have intended for Section 289 to allow the grossly excessive award of infringer's profits that the Federal Circuit affirmed in the decision below, nor would it have intended for design patents to be used unfairly to destroy competition, innovation, and the wellbeing of many. *Amici* therefore urge the Court to reverse the Federal Circuit's erroneous interpretation of Section 289, and thereby prevent the perverse incentives, and tangible harms, that would otherwise follow for entrepreneurs and the communities *amici* represent.

ARGUMENT

THE FEDERAL CIRCUIT'S ENTIRE-PROFITS RULE WILL ADVERSELY AFFECT THE SOCIAL AND ECONOMIC WELLBEING OF MINORITIES AND RURAL AMERICANS.

The court of appeals' erroneous interpretation of 35 U.S.C. 289 will encourage more numerous—and absurdly excessive—design patent damage awards that could erase profits and threaten entire businesses. The threat posed by these entire-profits awards will also hand design-patent-holders a weapon so powerful that it could distort markets in a variety of industries.

A. The risk of excessive design patent damages imposes burdens on entrepreneurs, especially those from minority and rural communities.

Interpreting Section 289 to entitle design-patent holders to entire-profits awards will create a world in which some minor design feature of a company's product could produce a judgment that forces it to give all of its profits to a competitor. The risk of incurring such an award could powerfully shape segments of the American economy, affecting many companies' everyday decisionmaking. But the burdens associated with this risk will not be evenly distributed.

Big companies like Apple might not find entireprofits awards to be particularly troublesome, because of their privileged position in the marketplace. Big companies often have enormous resources to employ in developing products. Indeed, Apple boasts of the "billions of dollars" and the fleet of designers and engineers that it utilized to develop the iPhone. BIO 1. This product-design advantage is coupled with many others that accompany market incumbency, including better marketing networks, established manufacturing facilities, economies of scale, and name recognition that creates customer confidence and loyalty, each of which make it easier for big companies like Apple to bring products to market.² These many advantages make it easier for big companies to absorb the potential for an

² See Patent Reform Impact on Small Venture-Backed Companies: Hearing Before the H. Small Bus. Comm., 110th Cong. 98 (2007) (testimony of John Neis, Managing Director, Venture Investors).

entire-profits award on one of their products, especially when most large companies will have multiple noninfringing product lines to help soften the blow.

In contrast, small, entrepreneurial companies must survive a mine-field of potential business-destroying consequences to develop an innovative product. Inevitably they have less access to capital, and thus less capacity to absorb risk, than their more-established rivals, and their survival is often staked on the initial success of a single product line. Newcomers also face competitive threats from resource-rich incumbents, with a variety of competition-destroying tools at their disposal, including patents. For all these reasons, the possibility of entire-profits awards will have significant real-world consequences for small companies, stifling their competitiveness, imposing new barriers of entry, and chilling the development of innovative products. These consequences weigh heavily against adopting the Federal Circuit's entire-profits rule.

1. Threats of entire-profits awards make entrepreneurs vulnerable to design-patent "trolls" and incumbents alike.

The sheer size of an entire-profits award will impart powerful leverage, enabling design-patent holders to extract extravagant sums for even small portions of product-designs that unwittingly stray too close to their own patented designs.³ That risk will powerfully affect

³ To be clear, *amici* are not advocating for greater protection for counterfeiters or willful infringers, who are rightly subject to severe penalties for their wrongdoing. E.g., 35 U.S.C. 284 (providing enhanced damages for willful infringement); 18 U.S.C. 2320 (making

the incentives on market participants that encounter design-patent holders.

Of course, the exclusive property right embodied in a patent is designed to deter some degree of competition, and rightly so. But the Court has emphasized that patent law requires maintaining "a careful balance between the need to promote innovation" through patent protection, Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 146 (1989), and the recognition that a patent's exclusive monopoly undermines the "baseline of free competition upon which the patent system's incentive to creative effort depends," id. at 156. The consequences of patent protection may be valuable to patent holders, but they also pose risk and uncertainty for competitors, which sometimes over-deters them from undertaking their own innovative efforts. And there is no doubt that the outsized damages associated with entire-profits awards come with outsized over-deterrent potential.

In fact, the anti-competitive effects accompanying entire-profits design-patent awards are likely to be especially debilitating, because the possibility of an excessive total-profit award is not a litigation risk that a company can internalize. Companies often guard against litigation risks by raising prices in the short term to create a buffer of cash to finance potential judgments over the long term. But when faced with a risk of an entire-profits award, charging more just means losing

trafficking in counterfeit goods a federal crime). Their sole concern is that true competition is not inhibited by fears of inadvertent infringement.

more.⁴ For small companies lacking diverse product lines, a single award could thus destroy the entire business, which means that the risk of such awards is likely to adversely affect entrepreneurs in a large number of industries.

This is not speculation. It is the demonstrably predictable outcome of affirming the Federal Circuit's interpretation of Section 289. Studies confirm that the high cost of patent lawsuits and damage awards already shapes the way entrepreneurs structure and develop their businesses. Companies forced to work under threats from patent holders spend far less on research and development-regardless of the merits of those threats.⁵ And in surveys, startup executives admit that litigation risks frequently force their firms to make substantial shifts in strategy or exit business lines entirely.⁶ These surveys also show that the smaller a company is, the more likely it becomes that such threats will have a significant impact on the way the company operates. Chien, note 6, supra, at 462. If the risk of conventional patent damage awards is enough to create

⁴ Tim Sparapani, Stretched Too Far: Convoluted Design Patent Rules Empower Patent Trolls, Forbes, Dec. 3, 2015, <http://onforb.es/1Ns9NnM>.

⁵ Stephen Kiebzak et al., *The Effect of Patent Litigation and Patent Assertion Entities on Entrepreneurial Activity* 3 (MIT Sloan Sch. of Mgmt., Working Paper No. 5095-14, 2015).

⁶ Colleen Chien, Startups and Patent Trolls, 17 Stan. Tech. L. Rev. 461, 461-462 (2014); see also Robin Feldman, Patent Demands and Startup Companies: The View from the Venture Capital Community 49 (UC Hastings Research Paper No. 75, 2013).

such risks, then entire-profits awards will exert even more powerful incentives, especially upon entrepreneurs and small businesses.

The effects of this heightened risk will be felt in a variety of industries well beyond consumer electronics, including those in which design would not be expected to have an impact. This was amply illustrated in Nordock, Inc. v. Systems, Inc., 803 F.3d 1344 (Fed. Cir. 2015). The product at issue in that case could not have been less design-intensive: a dock leveler that enables a smooth transfer of items from trucks onto loading docks. Id. at 1347. The patented design could not have been for a more utilitarian, less ornamental feature: the "lip and hinge plate" on the leveler. *Ibid.* And the manufacturer could not have been less cosmopolitan, hailing from Malvern, Arkansas and Germantown, Wisconsin.⁷ But the consequences were nevertheless excessively harmful to the business. The Federal Circuit, relying on the decision below in this case, rejected all attempts to limit the patent holder's recovery to the profits attributable to portion of the product incorporating the patented design, and held that the manufacturer should have been forced to turn over all of its profits on the entirety of the dock leveler. 803 F.3d at 1354-55.

Certain patent holders can be expected to leverage this outsized risk to undue advantage. For instance, some abusive non-practicing entities, or "trolls," will be able to litigate their way to profits on the backs of unsuspecting product-creators. Those who would dismiss this concern ignore the power of design patents,

⁷ See DLM, Contact Us, http://www.dlminc.net/Contact-Us/.

as augmented by the potential for entire-profit awards, and likewise underestimate the ingenuity of such abusive non-practicing entities. Design patents are cheaply and easily obtained, and make it possible to patent very broad design concepts when those concepts are incorporated into a particular product-like say, the curve of the iPhone's bezel. Combine these general, universally applicable designs with the broad, eye-in-thebeholder standards for determining infringement, which ask a jury to determine, solely by "comparing the patented design to the accused products," BIO 22, whether the "ordinary observer" would be confused into thinking that it embodied the patented design, Gorham Co. v. White, 81 U.S. (14 Wall.) 511, 528 (1872), and a design-patent holder would be able to broaden the patent's reach to very powerful effect, causing a very general design to implicate a number of potentially There is thus little question that infringing products. design patents have the capacity for abuse.

Until the Federal Circuit's decision in this case, no one had any incentive to make use of this capacity. But the availability of large damages awards for even minor design features following in that decision's wake has completely changed the litigation landscape. The "trolls" have taken notice. There is at least some evidence that non-practicing entities are assembling suites of design patents to assert against product developers, as Petitioners, *amici*, and commentators have already explained.⁸

Moreover, if history is any guide, the changed litigation landscape is likely to attract many more such abusers of the design-patent system if the Federal Circuit's interpretation of Section 289 is upheld. For example, similar abuses followed a series of Federal Circuit decisions interpreting the false marking statute, 35 U.S.C. 287(a), 292(b), to allow any person to bring a qui tam action to challenge the improper marking of a product, and to recover up to \$500 for each improperly marked article. Forest Grp., Inc. v. Bon Tool Co., 590 F.3d 1295, 1304 (Fed. Cir. 2009); Stauffer v. Brooks Bros., Inc., 619 F.3d 1321, 1327-29 (Fed. Cir. 2010). This excessive penalty led to a flood of challenges from wouldbe qui tam plaintiffs,⁹ until Congress was forced to eliminate the qui tam option altogether in the Leahy-Smith America Invents Act, Pub. L. No. 112-29, §16, 125 Stat. 284 (2011).

Indeed, this is not the first time that design patents have spawned abuse. In the late 1860s, the Patent Office experimented with allowing "design" patents to be issued for minor functional improvements on already existing

⁸ Guiseppe Macri, *Patent Trolls Are Already Abusing the* Apple v. Samsung *Ruling*, InsideSources (Oct. 1, 2015), <http://bit.ly/1TUg13T>.

⁹ See Kelsey I. Nix & Laurie N. Stempler, Federal Circuit Ignites Interest in False Patent Marking Lawsuits, The Metro. Corporate Counsel 35 (Oct. 2010), <http://bit.ly/1WBhVMG> (reporting that false marking claims accounted for 15 percent of all patent cases filed in the first nine months of 2010).

products. Ex Parte Crane, 1869 Dec. Comm'r Pat. 7, 7 reprinted in Hector T. Fenton. The Law of Patents for Designs 225, 226-26 (1889). This ill-considered effort spawned the creation of "design patent sharks," who took out "design" patents on basic farm machinery like plows, shovels, and other basic farm tools, and then sued for unsuspecting farmers using the protected technology.¹⁰ Cases like *Nordock* illustrate that an overly expansive interpretation of the recovery available under Section 289 could lead to a resurgence in this patentenabled chicanery, by allowing excessive damages to be extracted on the basis of the "design" of what is, in essence, a purely functional article. There is thus no shortage of abusers that will exploit the availability of entire-profit damages under Section 289. Although larger companies like Apple may be unconcerned about fostering a market for such abusive conduct, because they have the resources to fend off, or buy off, even the most abusive non-practicing entities, these abusers can be expected to exact a heavy toll upon smaller, entrepreneurial companies that lack the means to effectively defend against them.

Moreover, non-practicing entities are only part of the problem. Indeed, the outsized risks associated with entire-profit awards could be even more harmful when asserted in disputes between product-producing competitors. The ability to credibly threaten competitors

¹⁰ Gerard N. Magliocca, *Blackberries and Barnyards: Patent Trolls and the Perils of Innovation*, 82 Notre Dame L. Rev. 1809, 1810-11, 1829 (2007) (describing contemporary debates in Congress and in the public over the problem of so-called "patent sharks").

with entire-profit awards will give market incumbentsthose with the resources to patent their designs and aggressively enforce their patent rights—unwarranted advantages against less-established rivals. Incumbents may be able to force entrepreneurs to exit the markets they dominate, and they will also be able to stifle the competitiveness of those who choose to remain. Newcomers' chances of creating innovative products will be inhibited because they will have to give incumbents' patented designs too-wide a berth. And cash-strapped startups will be forced to incur additional costs in research and development, to avoid the potential for a huge damages award, or be made to expend precious resources fighting a design-patent infringement suit. This will hinder the prospects of those that choose to compete against design-patent holders, by making the development of new businesses, and developing competing products, more difficult and expensive.

The threats to small companies and entrepreneurs posed by entire-profit awards will exist even when there is no potential that the company itself could infringe. This is because when an incumbent forces a competitor out of business for infringing a patented design, it threatens all of the competitors' component manufacturers, producers, and distributors. For these downstream companies, the risk of an entire-profit award is especially troublesome and unfair, because it is one they cannot avoid, but could nonetheless drive them out of business.

2. The anti-competitive effects of entireprofits awards pose special risks to minority and rural entrepreneurs.

All of this is bad for all entrepreneurs. But it would be especially difficult for the rural and minority business owners *amici* represent, whose success is vital to empower the disadvantaged communities they represent.¹¹ Minority and rural entrepreneurs will be particularly hard-hit by the anti-competitive harms posed by excessive design-patent damage awards because of their vulnerable position in the American marketplace

Historically, minorities have faced unique challenges starting and developing businesses, due to inequalities in experience and education, access to capital, as well as lending and other types of discrimination.¹² While minority business owners have made great strides in the American marketplace, they still lag far behind nonminorities in business ownership.¹³

¹¹ J.P. Morgan Chase & Co., *The Big Difference Small Businesses Can Make*, Politico, Apr. 22, 2016 (*Big Difference*), <http://politi.co/1sJLwH1>.

¹² Robert W. Fairlie et al., U.S. Dep't of Commerce, Minority Bus. Dev. Agency, Disparities in Capital Access between Minority and Non-Minority-Owned Businesses: the Troubling Reality of Capital Limitations Faced by MBEs 13, 17-27 (2010) (Troubling Reality), <http://bit.ly/25GifeH>.

¹³ See Valentina Zarya, The fastest growing group of entrepreneurs in the U.S.? Minority Women, Fortune, Aug. 21, 2015, <http://for.tn/1UXjYXy> (analyzing 2010 Census data).

Rural business development and employment have lagged even farther behind because rural businesses are geographically distant from many commerce centers, and also because the poverty, poor health, and lack of education prevalent in rural areas place severe limitations on the available labor supply.¹⁴ Indeed, rural businesses have been suffering a long, devastating decline, as more people move into larger metropolitan areas and local "mom-and-pop" businesses are displaced by large chains.¹⁵

Because of these difficulties, rural and minorityowned businesses tend to be smaller, fewer in number, and undercapitalized compared with their peers.¹⁶ These communities were also disproportionately affected by the economic downturn in 2007-2008, which was particularly destructive to the African-American community, causing it to lose half its total wealth. *Big Difference*, note 11, *supra*. Rural and minority-owned businesses have also lagged behind in the recovery, facing greater difficulty

¹⁴ Council of Econ. Advisors, Exec. Office of the President, Strengthening the Rural Economy – the Current State of Rural America Section B (Strengthening the Rural Economy), <http://1.usa.gov/1JVKWvm>.

¹⁵ Roberto Gallardo, *Study: Trends in Rural Businesses*, Daily Yonder, May 7, 2015, ">http://bit.ly/1Uo26Tv>">http://bit.ly/1Uo26Tv.

¹⁶ Troubling Reality 9; Deborah Markley et al., RUPRI, Access to Capital in Rural America: Supporting Business Startup, Growth and Job Creation in the Wake of the Great Recession, Interim Brief 2 (Apr. 2012) (Access to Capital in Rural America), <http://bit.ly/1PdHdsu>.

than other groups obtaining financing for new businesses.¹⁷

Accordingly, minority and rural entrepreneurs often find themselves forced to compete against more established businesses in a host of industries, uniquely dependent on open, competitive markets to succeed, and uniquely vulnerable to anti-competitive threats from design-patent holders. The generally small size of rural and minority-owned businesses provide them little capacity to absorb a potential entire-profits award. Further, the special difficulties these communities experience obtaining capital will make it harder for them to raise money to cover the increased design, research, and development costs needed to mitigate the risk of design infringement, which in turn will make it even harder for them to bring new products to market. Rural and minority businesses will also more often find themselves among the smaller, downstream component manufacturers that are vulnerable to the destructive potential of design-patent infringement occurring upstream in the supply chain. Accordingly, threats of entire-profits awards could destroy minority and rural businesses, and close markets to entrepreneurs from communities, them with these leaving fewer opportunities for individual success and depriving their communities of jobs and chances for advancement.

¹⁷ Troubling Reality 18; VEDC, Investing in the Success of African-American-Small Businesses: Recommendations for Increasing Access to Capital 1 (Oct. 2015), <http://bit.ly/1VGHSsU>; Access to Capital in Rural America 2.

B. The risk of entire-profits awards also threatens the affordability of Internet access for minority, rural, and low-income Americans.

The possibility of entire-profits awards would also likely result in higher prices for smartphones, due to excessive damage awards, increased litigation costs, and decreased industry competition. This could threaten the ability of millions of low-income, minority and rural Americans to connect to the Internet.

> 1. Drastically excessive design-patent damage awards threaten to raise the cost of smartphones.

The risk of entire-profits awards created by the Federal Circuit's interpretation of Section 289 will put significant cost pressures on the smartphone industry. That industry is already heavy with design patents, with nine of the top twenty design patent holders in the United States tied to smartphones in some way.¹⁸ The costs of producing smartphones are also extremely high—laden with hefty research and development expenses, costs for exotic materials, and indeed, patent royalties that nearly exceed the cost of the hardware that

¹⁸ Ann Armstrong et al., *The Smartphone Royalty Stack: Surveying Royalty Demands for the Components Within Modern Smartphones* 67 (WilmerHale Working Paper Apr. 2014) (*Smartphone Royalty Stack*), <http://bit.ly/1QTIDYv>; see also USPTO Statistics, Design Patenting by Organizations (2015), <http://1.usa.gov/25FLE8K> (listing the top design-patenting organizations in 2015).

goes into the phone. *Smartphone Royalty Stack*, note 18, *supra*, at 2.

These significant risks are likely to lead to decreased competition, as firms hit with entire-profits judgments, or threats of such litigation, are forced out of business, forced out of the market, or simply forced to refrain from vigorously competing. These factors will reverse the incentives that have compelled manufacturers to provide more affordable offerings, and will discourage innovations that would otherwise further drive down prices.¹⁹ All this means higher prices for consumers.

2. Smartphones are vital to provide Internet access to marginalized communities.

These price increases will make life harder for all who depend upon smartphones for Internet access, but will be worst for many minority and rural consumers, who perhaps stand to gain the most from Internet access, and for whom smartphones provide the only affordable means of attaining that access.

From the very beginning of the Internet, there have been stark economic, racial, and geographic gaps between those who could get online and those who could not; disparities that persist today.²⁰ As the result of the high cost of Internet access, as well as cultural and

¹⁹ See Scott Martin, Consumers likely to feel impact of Apple defeat of Samsung, USA Today, Aug. 27, 2012, <http://usat.ly/1VGHomH>.

²⁰ U.S. Dep't of Commerce, Falling Through the Net: a Survey of the "Have Nots" in Rural and Urban America (Jul. 1995), ">http://l.usa.gov/1UlCoyR>.

language barriers inhibiting adoption,²¹ some 22 percent of African-Americans (representing 10.1 million people) and 19 percent of Hispanics (another 10.8 million people) currently have no Internet access, as compared to only 15 percent of non-Hispanic whites.²² Rural Americans' geographical isolation has also impeded their access being 10 percent less likely than urban residents to have an Internet connection. *Americans' Internet Access*, note 22, *supra*, at 1. The poor and uneducated also are far less likely than average to use the Internet or own a smartphone. *Id.* at 6.

This inability to access the Internet inhibits the upward mobility of many in minority and rural communities. Americans without ready Internet access find themselves effectively shut out of the many job openings that now require online applications.²³ More generally, Internet exclusion prevents people from efficiently accessing information, participating in civic

²¹ James Prieger, *The Broadband Digital Divide and the Benefits of Mobile Broadband for Minorities* 7, 9 (Pepperdine Univ. Sch. of Pub. Policy, Working Paper No. 45 2013).

²² U.S. Census Bureau, 2014 Nat'l Population Projections: Summary Tables Table 10, <http://1.usa.gov/1vON2Gp> (projecting that there are 46.1 million "blacks" in the United States, and 56.7 million Hispanics); Andrew Perrin et al., Pew Research Ctr., Americans' Internet Access: 2000-2015 1(2015) (Americans' Internet Access), <http://pewrsr.ch/1WBiyWB> (estimating that in 2015, 22 percent of blacks and 19 percent of Hispanics do not use the Internet).

²³ HUD, Understanding the Broadband Access Gap, PDR Edge, http://bit.ly/1Zq9Gks>.

society, and communicating with others. The absence of Internet access thus is associated with persistent decreased social and economic mobility, and diminished quality of life.²⁴

While Internet exclusion hurts all unconnected Americans, it "compounds inequalities for historically marginalized groups."²⁵ The inability to connect to the exacerbates Internet effects of centuries of discrimination and cultural barriers that have left minorities unequal in virtually every facet of American life, including education, health, commerce, and political involvement.²⁶ And it reinforces the geographic isolation that poses socioeconomic, health, and educational problems for rural Americans not experienced by their urban and suburban peers. Strengthening the Rural *Economy*, note 14, *supra*.

These groups are beginning to make strides in obtaining the life-altering benefits of Internet access. Most minority groups, including African-Americans and Hispanics, are adopting broadband Internet at a pace well above the national average, a growth that is entirely

²⁴ See Lisa M. Coleman, Creating a Path to Universal Access: The FCC's Network Neutrality Rules, the Digital Divide, & the Human Right to Participate in Cultural Life, 30 Temp. J. Sci., Tech. & Envt'l L. 33, 49-50 (2011).

²⁵ FCC, Connecting America: the National Broadband Plan 129 (2011), http://bit.ly/1JHqKMN .

²⁶ Devah Pager et al., *The Sociology of Discrimination: Racial Discrimination in Employment, Housing, Credit, and Consumer Markets*, 34 Ann. Rev. Sociology 181, 186-193, 197-200 (2008).

attributable to smartphone ownership.²⁷ Now, a higher proportion of both African-Americans (70 percent) and Hispanics (71 percent) own smartphones than non-Hispanic whites (61 percent).²⁸ And minorities often forego landlines altogether in rates much higher than average.²⁹

Smartphone adoption has improved the social, economic, and political lives of minorities, providing them avenues to further educational attainment,³⁰ vital health resources for these underserved communities,³¹ better business and employment opportunities,³² and deeper

²⁷ U.S. Dep't of Commerce, Nat'l Telecomm. & Info. Admin., Digital Nation: Expanding Internet Usage 11 (Feb. 2011) (Expanding Internet Usage).

²⁸ Aaron Smith, Pew Research Ctr., U.S. Smartphone Use in 2015 13 (2015) (U.S. Smartphone Use in 2015), <http://pewrsr.ch/19JDwMd>.

²⁹ John B. Horrigan et al., Pew Research Ctr., *Home Broadband* 2015 32 (Dec. 12, 2014) (*Home Broadband* 2015), <http://pewrsr.ch/1PbbJC9>.

³⁰ Prieger, 18 (noting that African-Americans especially have benefitted from online educational resources, being significantly more likely to take online classes than average).

³¹ The Hispanic Inst., *Hispanic Broadband Access: Making the Most of the Mobile, Connected Future*, Mobile Future 13 (July 2012) (*Hispanic Broadband Access*) (noting that online health resources have proven uniquely important for minorities, who suffer higherthan-average rates of diabetes, obesity, and cardiovascular disease), <http://bit.ly/1TQNnR7>.

social access and integration, *Hispanic Broadband* Access, note 32, *supra*, at 2.

Rural Americans have also begun to overcome their geographic isolation through mobile Internet access. Although rural Americans have been slower in adopting smartphones than those in suburban and urban areas, those who do purchase a smartphone are just as likely as those in urban areas to use it as their sole source of Internet access. Ibid.; U.S. Smartphone Use in 2015, note 28, supra, at 15. This has given rural communities access to mobile applications that provide enriching educational opportunities³³ and allow visits with doctors in far-away cities.³⁴ Perhaps most importantly, mobile applications promote the development of rural businesses, allowing geographically isolated rural businesses to tap into global markets, business development resources, crowd-sourced funding, and a telecommuting labor force, all from their mobile phones.³⁵ This benefits rural communities as a whole,

 $^{^{32}}$ Aaron Smith, Pew Research Ctr., Searching for Work in the Digital Era 10, 17 (Nov. 19, 2015), <http://pewrsr.ch/216mDjS> (noting that minorities are more likely than average to use the Internet to search for and apply to jobs online, and to use a smartphone as part of that job search).

³³ E.g., ConnectEd Initiative, Exec. Office of the President, <http://1.usa.gov/1BOFjxr> (detailing the President's initiative to bring mobile learning to rural school districts).

³⁴ Clara Ritger, *How Mobile Apps Could Transform Rural Health Care*, Nat'l J., Nov. 11, 2013.

because local businesses provide a higher rate of return for their communities than chains.³⁶

Vitally, these gains have been greatest for the least well-off in these historically marginalized communities, because low-income and uneducated Americans are far more likely to rely exclusively on a smartphone for Internet access than the average. U.S. Smartphone Use in 2015, note 28, supra, at 3, 18. Indeed, low-income buyers are currently the fastest growing sector of the smartphone market.³⁷

3. Increasing smartphone prices will make Internet access prohibitively expensive for millions in marginalized communities.

Increased smartphone prices present a threat to these gains and an obstacle to further progress in Internet adoption for the communities *amici* represent.

The predominant reason minority, rural, and lowincome populations turn to smartphones for Internet access is that mobile Internet is usually far less expensive than a wired broadband connection. Smartphones can be purchased at many locations for

³⁵ Gordon Arbuckle Jr., Iowa State Univ. Extension & Outreach, Iowa State Survey Shows Farmers Using Information Technology for Decision-making (Sept. 23, 2015), <http://bit.ly/1UsdJIy>; Gallardo supra.

³⁶ Am. Indep. Bus. Alliance, *Ten Studies of the "Local Economic Premium"* (Oct. 2012), <http://bit.ly/1WXBm21>.

³⁷ NPD Grp., U.S. Smartphone Sales among Consumers Earning Less than \$30,000 Grow More Than 50 Percent, According to the NPD Group (Apr. 15, 2015), http://bit.ly/1Ya92ZZ>.

under \$100, much cheaper than the hefty price of a home computer.³⁸ And mobile broadband plans usually cost far less than their fixed broadband counterparts.³⁹ Affordable smartphones therefore enable people to have Internet access who might not otherwise be able to afford it.

That said, many who currently rely on smartphones for Internet access can barely afford it, making their connection to the Internet extremely tenuous.⁴⁰ Cost is also the leading reason that currently unconnected minority and rural Americans cite as the reason they cannot access the Internet. Expanding Internet Usage, note 27, *supra*, at 5. Accordingly, loss of competition and price increases brought about through excessive design patent damages will make Internet access too expensive for many current adopters, and will put the Internet further out of reach for those who have not yet connected.

In sum, interpreting Section 289 to entitle designpatent holders to entire-profits awards even where a partial design is applied to a minor product component would discourage entrepreneurs from minority and rural

³⁸ Lynette Holloway, Apple vs. Samsung: Could Ruling Widen Digital Divide?, NewsOne (2014), <http://bit.ly/1jFYtqH>.

³⁹ Nick Russo et al., Open Tech. Inst., *The Cost of Connectivity* 2014 14, 21 (2014), http://bit.ly/1Zw03AV>.

 $^{^{40}}$ U.S. Smartphone Use in 2015 6 (relating that nearly half of those who depend upon smartphones for Internet access have had to cancel their service, and 75 percent "frequently" or "occasionally" reach their data caps).

communities from starting and developing their businesses. That interpretation would also harm the consumers and citizens of these communities, pricing them out of the most affordable means for them to obtain the essential benefits of Internet access. For both these reasons, the Federal Circuit's decision in this case should be reversed.

CONCLUSION

The judgment of the court of appeals should be reversed.

Respectfully submitted,

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